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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,495	02/20/2002	Walter Herman Maria Louis Luyten	JAB-1526	3238

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EXAMINER

ANGELL, JON E

ART UNIT

PAPER NUMBER

1635

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/069,495

**Applicant(s)**LUYTEN, WALTER HERMAN  
MARIA LOUIS**Examiner**

Jon Eric Angell

**Art Unit**

1635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18,22-45 and 48-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-18,22-45 and 48-54 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

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### **DETAILED ACTION**

The preliminary amendment filed 2/20/02 has been entered. Claims 1-18, 22-45 and 48-54 are currently pending in the application and are addressed herein.

#### ***Election/Restrictions***

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1, drawn to a method for inhibiting the lethal effect of expressing an otherwise lethal protein in a cell.

Group II, claim(s) 2-16, drawn to a method for identifying compounds which inhibit or enhance expression or activity of proteins which are lethal to a cell, tissue or organism.

Group III, claim(s) 17 and 18, drawn to a compound identifiable as an inhibitor or an enhancer of expression or activity of an otherwise lethal protein.

Group IV, claim(s) 23, drawn to a method for monitoring the severity of a disease condition.

Group V, claim(s) 24 and 45, drawn to a nucleic acid molecule encoding a rat Gas1 according to SEQ ID NO: 2 or variant thereof.

Group VI, claim(s) 25-28 and 34-40, drawn to a nucleic acid encoding a protein comprising the amino acid sequence according to SEQ ID NO: 4, or a variant thereof.

Group VII, claim(s) 29, 30 and 45, drawn to an antisense molecule capable of hybridizing to the nucleic acid sequence of claim 25 under high stringency conditions wherein the antisense molecule comprises SEQ ID NO: 3.

Group VIII, claim(s) 29, 30 and 45, drawn to an antisense molecule capable of hybridizing to the nucleic acid sequence of claim 25 under high stringency conditions wherein the antisense molecule comprises SEQ ID NO: 5.

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Group IX, claim(s) 31-33 and 45, drawn to a protein encoded by SEQ ID NO: 1.

Group X, claim(s) 41 and 42, drawn to a method of identifying compounds capable of preventing or accelerating Gas1 mediated cell death.

Group XI, claim(s) 43 and 44, drawn to a compound identifiable as an inhibitor or an accelerator of cell death.

Group XII, claim(s) 52 and 53, drawn to an antibody.

Group XIII, claim(s) 54, 22 and 48, drawn to a method for decreasing the expression of a protein that is lethal to a cell, wherein the cell is associated with the neurological disease Parkinson's disease.

Group XIV, claim(s) 54, 22 and 48, drawn to a method for decreasing the expression of a protein that is lethal to a cell, wherein the cell is associated with the neurological disease Alzheimer's disease.

Group XV, claim(s) 54, 22 and 48, drawn to a method for decreasing the expression of a protein that is lethal to a cell, wherein the cell is associated with the neurological disease Huntington's disease.

Group XVI, claim(s) 54, 22 and 48, drawn to a method for decreasing the expression of a protein that is lethal to a cell, wherein the cell is associated with the neurological disease amyotrophic lateral sclerosis.

Group XVII, claim(s) 54, 22 and 48, drawn to a method for decreasing the expression of a protein that is lethal to a cell, wherein the cell is associated with a neurological disease caused by thrombosis or cerebral trauma.

Group XVIII, claim(s) 54, 22 and 49, drawn to a method for decreasing the expression of a protein that is lethal to a cell, wherein the cell is associated with a cardiovascular disorder.

Group XIX, claim(s) 54, 22 and 50, drawn to a method for decreasing the expression of a protein that is lethal to a cell, wherein the cell is associated with an autoimmune disorder.

Group XX, claim(s) 54, 22 and 51, drawn to a method for decreasing the expression of a protein that is lethal to a cell, wherein the cell is associated with a neuroendocrine disorder.

Group XXI, claim(s) 54, 22 drawn to a method for decreasing the expression of a protein that is lethal to a cell, wherein the cell is associated with cancer.

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37 CFR 1.475(b) states:

“An international or a national stage application containing claims to different categories of invention will be considered to have unity of invention if the claims are drawn only to one of the following combinations of categories:

- (1) A product and a process specially adapted for the manufacture of said product; or
- (2) A product and process of use of said product; or
- (3) A product, a process specially adapted for the manufacture of the said product, and a use of the said product; or
- (4) A process and an apparatus or means specifically designed for carrying out the said process; or
- (5) A product, a process specially adapted for the manufacture of the said product, and an apparatus or means specifically designed for carrying out the said process.

37 CFR 1.475(c) states:

“If an application contains claims to more or less than one of the combination of categories of invention set forth in paragraph (b) of this section, unity of invention might not be present.”

37 CFR 1.475(d) also states:

“If multiple products, processes of manufacture or uses are claimed, the first invention of the category first mentioned in the claims of the application and the first recited invention of each other categories related thereto will be considered as the main invention in the claims, see PCT Article 17(3)(a) and 1.476(c).”

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37 CFR 1.475(e) further states:

“The determination whether a group of inventions is so linked as to form a single general inventive concept shall be made without regard to whether the inventions are claimed in separate claims or as alternative within a single claim.”

The inventions listed as Groups I-XXI do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the inventions do not share a common special technical feature because in order for a technical feature to be considered a “special” technical feature it MUST be novel. In the instant case, the technical feature that links Inventions I-XXI is Gas1. Since Gas1 was known in the art, as evidenced in the International Search Report (e.g., see EVDOKIOU, LEE, DEL SAL and RUARO references), it is not a special technical feature.

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

The species of claim 9 are: glutamate, NMDA, AMPA, kainite receptor.

The species of claim 10 are: type 1 to 8 metabotropic receptor.

The species of claim 13 are: ribozymes or DNAzyme activity.

Applicant is required, in reply to this action, to elect a single species (i.e., one (1) from each group of species listed above) to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

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Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: in order for a technical feature to be considered a “special” technical feature, it must be novel. In the instant case, there is no special technical feature because the species are not novel—they are well known to one of ordinary skill in the art. As such, there is no special technical feature linking the species.

A telephone call was made to 8/13/04 on Myra McCormack to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

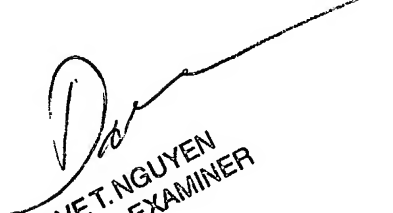
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jon Eric Angell whose telephone number is 571-272-0756. The examiner can normally be reached on Mon-Fri, with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John LeGuyader can be reached on 571-272-0760. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jon Eric Angell, Ph.D.  
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DAVE T. NGUYEN  
PRIMARY EXAMINER